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     (FILE 'HOME' ENTERED AT 12:50:03 ON 30 JUN 2005)

     FILE 'REGISTRY' ENTERED AT 12:50:14 ON 30 JUN 2005
L1        25263 S TTAGTT/SQSN AND SQL=<100

     FILE 'CAPLUS, USPATFULL' ENTERED AT 12:53:34 ON 30 JUN 2005
L2         3653 FILE CAPLUS
L3         1383 FILE USPATFULL
     TOTAL FOR ALL FILES
L4         5036 S L1
L5          559 FILE CAPLUS
L6          108 FILE USPATFULL
     TOTAL FOR ALL FILES
L7          667 S L4 AND PY=<1998
L8            5 FILE CAPLUS
L9           13 FILE USPATFULL
     TOTAL FOR ALL FILES
L10          18 S L7 AND CPG
L11          18 DUP REM L10 (0 DUPLICATES REMOVED)
L12           4 FILE CAPLUS
L13           1 FILE USPATFULL
     TOTAL FOR ALL FILES
L14           5 S L7 AND IMMUNOSTIMUL?
L15           5 DUP REM L14 (0 DUPLICATES REMOVED)

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     (FILE 'HOME' ENTERED AT 12:50:03 ON 30 JUN 2005)

     FILE 'REGISTRY' ENTERED AT 12:50:14 ON 30 JUN 2005
L1        25263 S TTAGTT/SQSN AND SQL=<100

     FILE 'CAPLUS, USPATFULL' ENTERED AT 12:53:34 ON 30 JUN 2005
L2         3653 FILE CAPLUS
L3         1383 FILE USPATFULL
     TOTAL FOR ALL FILES
L4         5036 S L1
L5          559 FILE CAPLUS
L6          108 FILE USPATFULL
     TOTAL FOR ALL FILES
L7          667 S L4 AND PY=<1998
L8            5 FILE CAPLUS
L9           13 FILE USPATFULL
     TOTAL FOR ALL FILES
L10           18 S L7 AND CPG
L11           18 DUP REM L10 (0 DUPLICATES REMOVED)

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=> d ibib abs fhitstr 1-5

L15 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2005:362883 CAPLUS
DOCUMENT NUMBER: 142:409702
TITLE: Production of modified plant viruses as vectors of heterologous peptides, such as mammalian virus antigen epitopes, and their use in vaccines
INVENTOR(S): Lomonossoff, George P.; Johnson, John E.; Bendig, Mary; Jones, Tim; Longstaff, Marian
PATENT ASSIGNEE(S): The Dow Chemical Company, USA
SOURCE: U.S., 62 pp., Cont.-in-part of U.S. Ser. No. 612,858.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6884623	B1	20050426	US 1999-304967	19990505
WO 9218618	A1	19921029	WO 1992-GB589	19920402 <--
W: AT, AU, BB, BG, BR, CA, CH, CS, DE, DK, ES, FI, GB, HU, JP, KP, KR, LK, LU, MG, MN, MW, NL, NO, PL, RO, RU, SD, SE, US				
RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GN, GR, IT, LU, MC, ML, MR, NL, SE, SN, TD, TG				
US 6110466	A	20000829	US 1993-137032	19931215
US 5874087	A	19990223	US 1995-471048	19950606
US 5958422	A	19990928	US 1996-612858	19960605
PRIORITY APPLN. INFO.:			GB 1991-8386 A	19910419
			WO 1992-GB589 W	19920402
			US 1993-137032 A2	19931215
			US 1995-471048 A2	19950606
			US 1996-612858 A2	19960605
			GB 1994-14118 A	19940713
			WO 1995-GB1618 W	19950710

AB The invention relates to assembled particles of a plant virus containing a foreign peptide insert in the coat protein of the virus. The site of the insert is preferably free from direct sequence repeats flanking the insert. The invention relates to a method of production of the particles and their use, in particular in animal vaccines. In one embodiment mucin peptide epitopes are inserted into the coat protein of a plant virus (e.g. a comovirus, such as cowpea mosaic virus (CPMV)) having a β-barrel structure at an immunogenically effective site, such as in a loop connecting β-sheets or at/near the C-terminus. In a particularly preferred embodiment the foreign insert is made immediately preceding the proline 23 (Pro23) residue in the βB-βC loop of the small capsid protein (VP23) of CPMV. The resulting chimeric virus particles are extremely immunogenic, giving better results than KLH conjugation and not requiring the addition of exogenous adjuvant. To demonstrate the wide applicability of this invention, antigenic peptides from four different animal viruses, one bacterial pathogen of animals and a mammalian peptide hormone were used. Two of the viruses belong to the picomavirus group of animal viruses--foot and mouth disease virus (FMDV) and human rhinovirus (HRV). There are several important pathogens in this group, particularly, FMDV, poliomyelitis (polio) virus and hepatitis A virus. The third virus selected is human immune deficiency virus (HIV) which bears no similarity to any known plant virus, and for which no successful vaccines are currently available. The bacterial pathogen is Staphylococcus aureus, a causative agent of several animal diseases including mastitis in cows. The peptide hormone is porcine gonadotropin releasing hormone.
IT **850433-86-2**

RL: PRP (Properties)
(unclaimed nucleotide sequence; production of modified plant viruses as vectors of heterologous peptides, such as mammalian virus antigen epitopes, and their use in vaccines)
RN 850433-86-2 CAPLUS
CN 49: PN: US6884623 SEQID: 108 unclaimed DNA (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
REFERENCE COUNT: 60 THERE ARE 60 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:312611 CAPLUS
DOCUMENT NUMBER: 138:336403
TITLE: Malaria vaccines comprising MSA1 peptide and signal peptide and anchor peptide
INVENTOR(S): Davidson, Eugene A.; Yang, Shutong
PATENT ASSIGNEE(S): Georgetown University, USA
SOURCE: U.S., 54 pp., Cont.-in-part of U. S. Ser. No. 593,006, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6551586	B1	20030422	US 1998-117415	19981127
WO 9726911	A1	19970731	WO 1997-US1395	19970129 <--

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:		
US 1996-593006	B2	19960129
WO 1997-US1395	W	19970129

AB The present invention relates to an expression vector which expresses a malaria MSA1 peptide in combination with a signal peptide and anchor peptide in a host animal. The MSA1 peptide is combined with a signal peptide and anchor peptide for expression. Chimeric peptides being expressed with both signal peptides and anchor peptides were the most effective in eliciting an immunogenic response from a vaccinated host.
IT **515890-31-0**
RL: PRP (Properties)
(unclaimed nucleotide sequence; malaria vaccines comprising MSA1 peptide and signal peptide and anchor peptide)
RN 515890-31-0 CAPLUS
CN DNA, d(G-C-G-G-T-A-C-C-T-T-A-G-T-T-A-G-A-G-G-A-A-C-T-G-C-A-G-A-A-A-A-T) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
REFERENCE COUNT: 51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2002:271976 CAPLUS
DOCUMENT NUMBER: 136:274360
TITLE: Osteoprotegerin in treatment of osteoporosis and other bone diseases

INVENTOR(S): Boyle, William J.; Lacey, David L.; Calzone, Frank J.; Chang, Ming-Shi
PATENT ASSIGNEE(S): Amgen Inc., USA
SOURCE: U.S., 117 pp., Cont. of U.S. Ser. No. 577,788.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
US 6369027	B1	20020409	US 1996-706945	19960903	
US 6613544	B1	20030902	US 1995-577788	19951222	
DE 19654610	A1	19970626	DE 1996-19654610	19961220	<--
FR 2742767	A1	19970627	FR 1996-15707	19961220	<--
FR 2742767	B1	20010330			
CA 2210467	AA	19970703	CA 1996-2210467	19961220	<--
WO 9723614	A1	19970703	WO 1996-US20621	19961220	<--
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM					
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG					
EP 784093	A1	19970716	EP 1996-309363	19961220	<--
R: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE					
AU 9714686	A1	19970717	AU 1997-14686	19961220	<--
AU 710587	B2	19990923			
GB 2312899	A1	19971112	GB 1996-26618	19961220	<--
GB 2312899	B2	19990505			
CN 1182452	A	19980520	CN 1996-193441	19961220	<--
ZA 9610770	A	19980622	ZA 1996-10770	19961220	<--
EP 870023	A1	19981014	EP 1996-945279	19961220	<--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO					
JP 11503616	T2	19990330	JP 1996-523861	19961220	
NZ 332915	A	20000728	NZ 1996-332915	19961220	
CZ 292587	B6	20031015	CZ 1997-2538	19961220	
PL 187408	B1	20040730	PL 1996-321938	19961220	
US 6284485	B1	20010904	US 1997-795445	19970206	
US 6284728	B1	20010904	US 1997-795447	19970206	
US 6288032	B1	20010911	US 1997-795446	19970206	
TW 221482	B1	20041001	TW 1997-86104638	19970411	
BG 63347	B1	20011031	BG 1997-101813	19970805	
NO 9703699	A	19971021	NO 1997-3699	19970812	<--
US 6015938	A	20000118	US 1997-974022	19971118	
US 6284740	B1	20010904	US 1997-974186	19971118	
US 2003207827	A1	20031106	US 1999-405032	19990924	
AU 758672	B2	20030327	AU 1999-65400	19991222	
AU 9965400	A1	20000302			

PRIORITY APPLN. INFO.:		
US 1995-577788	A2	19951222
US 1996-706945	A	19960903
US 1996-771777	B1	19961220
WO 1996-US20621	W	19961220
US 1998-132985	A1	19980812

AB The present invention discloses a novel secreted polypeptide, osteoprotegerin, which is a member of the tumor necrosis factor receptor superfamily and is involved in the regulation of bone metabolism Also disclosed are rat,mouse and human nucleic acids encoding osteoprotegerin,

polypeptides, recombinant vectors and host cells for expression, antibodies which bind OPG, and pharmaceutical compns. Expression of rat OPG cDNA in transgenic mouse showed increase in bone d., particularly in femurs, pelvic bones and vertebrae. C-terminal truncations of osteoprotegerin are provided that inhibit bone resorption. Specifically, amino acid residues 22-185 which comprise four cysteine-rich domains are required for osteoprotegerin activity. Furthermore, osteoprotegerin monomers may be linked by disulfide linkages and the dimeric form of OPG appears to predominate in transgenic mice, although trimeric forms may also exist. The polypeptides are used to treat bone diseases characterized by increased resorption such as osteoporosis.

IT **406455-89-8**
RL: PRP (Properties)
(unclaimed nucleotide sequence; osteoprotegerin in treatment of osteoporosis and other bone diseases)

RN 406455-89-8 CAPLUS

CN DNA, d(C-C-T-C-C-T-T-T-A-A-T-T-A-G-T-T-A-A-A-A-C-A-A-A-T-C-T-A-G-T-A-T-C-A-A-A-T-C-G-A-T-T-G-T-G-T-T-T-G-T) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

REFERENCE COUNT: 47 THERE ARE 47 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1999:779118 CAPLUS

DOCUMENT NUMBER: 132:22171

TITLE: Recombinant poxvirus-cytomegalovirus compositions for diagnostic and **immunostimulant** use

INVENTOR(S): Paoletti, Enzo; Pincus, Steven E.; Cox, William I.; Kauffman, Elizabeth B.

PATENT ASSIGNEE(S): Connaught Lab, USA

SOURCE: U.S., 249 pp., Cont.-in-part of U.S. Ser. No. 471,014, abandoned.
CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 37

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
US 5997878	A	19991207	US 1996-658665	19960605	
US 4769330	A	19880906	US 1981-334456	19811224	<--
US 4603112	A	19860729	US 1982-446824	19821208	<--
ZA 8209386	A	19830928	ZA 1982-9386	19821221	<--
US 4722848	A	19880202	US 1984-622135	19840619	<--
US 5338683	A	19940816	US 1990-502834	19900404	<--
ZA 9002894	A	19910130	ZA 1990-2894	19900417	<--
EP 1367128	A1	20031203	EP 2003-18214	19920309	
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC					
US 5494807	A	19960227	US 1993-105483	19930812	<--
US 5482713	A	19960109	US 1993-124668	19930921	<--
US 5641490	A	19970624	US 1994-303124	19940907	<--
US 5756103	A	19980526	US 1995-457007	19950601	<--
US 5766599	A	19980616	US 1995-458101	19950601	<--
CA 2223282	AA	19961212	CA 1996-2223282	19960606	<--
WO 9639491	A1	19961212	WO 1996-US9454	19960606	<--
W: AU, CA, JP					
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE					
AU 9661601	A1	19961224	AU 1996-61601	19960606	<--
AU 722867	B2	20000810			
EP 837928	A1	19980429	EP 1996-919200	19960606	<--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,					

IE, FI

JP 2001520507	T2	20011030	JP 1997-501769	19960606	
US 5762938	A	19980609	US 1996-709209	19960821	<--
AU 9931252	A1	19990916	AU 1999-31252	19990525	
AU 747139	B2	20020509			
AU 770916	B2	20040304	AU 2000-59413	20000913	
AU 769221	B2	20040122	AU 2000-72198	20001212	
AU 2000072198	A5	20010222			
AU 761321	B2	20030605	AU 2001-16636	20010125	
JP 2004000222	A2	20040108	JP 2003-133500	20030512	
JP 3602844	B2	20041215			
JP 2004105187	A2	20040408	JP 2003-342873	20031001	
JP 3624911	B2	20050302			

PRIORITY APPLN. INFO.:

US 1981-334456	A2 19811224
US 1982-446824	A2 19821208
US 1984-622135	A3 19840619
US 1987-90209	B2 19870827
US 1989-339004	B2 19890417
US 1989-394488	B2 19890816
US 1990-502834	A3 19900404
US 1991-666056	B2 19910307
US 1991-713967	B2 19910611
US 1992-847951	B1 19920306
US 1993-105483	A2 19930812
US 1993-124668	A2 19930921
US 1995-471014	B2 19950606
US 1991-736254	B2 19910726
AU 1992-15871	A0 19920309
EP 1992-908110	A3 19920309
JP 1992-508313	A3 19920309
US 1992-918311	B1 19920721
AU 1995-22755	A3 19950406
US 1995-457007	A3 19950601
US 1996-658665	A 19960605
AU 1996-61601	A3 19960606
WO 1996-US9454	W 19960606
AU 1997-12780	A3 19961202
AU 1998-77412	A3 19980721

AB Attenuated recombinant viruses containing DNA encoding an HCMV antigen, as well as methods and compns. employing the viruses, expression products therefrom, and antibodies generated from the viruses or expression products, are disclosed and claimed. The recombinant viruses can be NYVAC or ALVAC recombinant viruses. The recombinant viruses and gene products therefrom and antibodies generated by the viruses and gene products have several preventive, therapeutic and diagnostic uses. The DNA of the recombinant viruses can be used as probes or for generating PCR primers.

IT **181926-13-6**, GenBank AR003070
RL: PRP (Properties)
(unclaimed nucleotide sequence; recombinant poxvirus-cytomegalovirus compns. for diagnostic and **immunostimulant** use)

RN 181926-13-6 CAPLUS

CN 47: PN: US5997878 SEQID: 4 unclaimed DNA (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 5 OF 5 USPATFULL on STN

ACCESSION NUMBER: 1998:17090 USPATFULL

TITLE: Antiviral liposome having coupled target-binding moiety and hydrolytic enzyme

INVENTOR(S): Virtanen, Jorma, Irvine, CA, United States
Virtanen, Sinikka, Irvine, CA, United States

PATENT ASSIGNEE(S): Burstein Laboratories, Inc., San Juan Capistrano, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5718915		19980217	<--
APPLICATION INFO.:	US 1995-424874		19950419 (8)	

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1994-332514, filed on 31 Oct 1994
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Naff, David M.
LEGAL REPRESENTATIVE: Pennie & Edmonds LLP
NUMBER OF CLAIMS: 28
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 28 Drawing Figure(s); 24 Drawing Page(s)
LINE COUNT: 2111
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Complexes are prepared containing two or more different effector molecules joined to each other by a joining component. At least one of the effector molecules can bind to a target molecule and at least one of the other effector molecules has therapeutic properties. The joining component can be liposomes, proteins and organic polymers including dendrimer polymers, and can be of sufficient length and/or flexibility to permit the therapeutic effector molecule to interact with a target at the same time as the binding molecules. An antiviral liposome is prepared by coupling to a liposome outer surface a hydrolytic enzyme capable of digesting a viral component and a target-binding moiety which may be a polypeptide, glycoprotein or glycoprotein fragment having specificity for viruses such as HIV-1, influenza virus and hepatitis virus. The hydrolytic enzyme may be a glycosidase, phospholipase, lipase, cholesterol esterase, nuclease or protease. A second hydrolytic enzyme and target-binding moiety may also be present, and albumin may be coupled to the liposome surface. Within the liposome may be an internal hydrolytic enzyme capable of digesting a viral component.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **204080-75-1P**
(antiviral liposomes having a coupled target-binding moiety and a hydrolytic enzyme)
RN 204080-75-1 USPATFULL
CN DNA, d(T-C-C-T-G-A-C-A-T-T-A-G-T-T-G-A-G-G-A-T-A-G-T-G), 5'-[3-[[(4-methoxyphenyl)diphenylmethyl]amino]propyl hydrogen phosphate] (9CI) (CA INDEX NAME)

STRUCTURE DIAGRAM IS NOT AVAILABLE

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(FILE 'HOME' ENTERED AT 12:50:03 ON 30 JUN 2005)

FILE 'REGISTRY' ENTERED AT 12:50:14 ON 30 JUN 2005
L1 25263 S TTAGTT/SQSN AND SQL=<100

FILE 'CAPLUS, USPATFULL' ENTERED AT 12:53:34 ON 30 JUN 2005
L2 3653 FILE CAPLUS
L3 1383 FILE USPATFULL
TOTAL FOR ALL FILES
L4 5036 S L1
L5 559 FILE CAPLUS
L6 108 FILE USPATFULL
TOTAL FOR ALL FILES

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L7          667 S L4 AND PY=<1998
L8            5 FILE CAPLUS
L9           13 FILE USPATFULL
     TOTAL FOR ALL FILES
L10          18 S L7 AND CPG
L11          18 DUP REM L10 (0 DUPLICATES REMOVED)
L12           4 FILE CAPLUS
L13           1 FILE USPATFULL
     TOTAL FOR ALL FILES
L14           5 S L7 AND IMMUNOSTIMUL?
L15           5 DUP REM L14 (0 DUPLICATES REMOVED)

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L11 ANSWER 1 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN
IT **201060-07-3**
RL: ANT (Analyte); PRP (Properties); ANST (Analytical study)
(determination of methylation status in BRCA2 gene of; PCR method specific for
detection of **CpG** island methylation)
RN 201060-07-3 CAPLUS
CN DNA, d(C-G-G-T-T-T-T-G-T-T-A-G-T-T-T-A-T-T-T-C-G) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

ACCESSION NUMBER: 2000:67446 CAPLUS
DOCUMENT NUMBER: 132:103739
TITLE: A PCR method specific for the detection of **CpG** island methylation
INVENTOR(S): Herman, James G.; Baylin, Stephen B.
PATENT ASSIGNEE(S): The Johns Hopkins University School of Medicine, USA
SOURCE: U.S., 59 pp., Cont.-in-part of U.S. 5,786,146.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6017704	A	20000125	US 1997-835728	19970411
US 5786146	A	19980728	US 1996-656716	19960603 <--
CA 2257104	AA	19971211	CA 1997-2257104	19970603 <--
WO 9746705	A1	19971211	WO 1997-US9533	19970603 <--
W: CA, IL, JP, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 954608	A1	19991110	EP 1997-927933	19970603
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2000511776	T2	20000912	JP 1998-500779	19970603
JP 3612080	B2	20050119		
IL 127342	A1	20020725	IL 1997-127342	19970603
US 6200756	B1	20010313	US 1998-123951	19980728
US 6265171	B1	20010724	US 2000-490558	20000125
JP 2004290200	A2	20041021	JP 2004-153956	20040524

PRIORITY APPLN. INFO.:

US 1996-656716	A2	19960603
US 1997-835728	A	19970411
JP 1998-500779	A3	19970603
WO 1997-US9533	W	19970603

AB The present invention provides a method of PCR, methylation specific PCR (MSP), for rapid identification of DNA methylation patterns in a **CpG**-containing nucleic acid. MSP uses the PCR reaction itself to distinguish between methylated and unmethylated DNA, which adds an improved sensitivity of methylation detection. The method involves converting the 5-Me cytosine of **CpG** islands to uracil and then performing PCR with probes that will hybridize to the uracil-containing DNA, but not to the 5-Me cytosine-containing sequences. The method is sensitive to 0.1% of methylated alleles of a given **CpG** island and can be performed on DNA extracted from paraffin-embedded samples. The method can be used to assay DNA methylation in tumors and tumorigenesis and its effects upon gene expression. The method is used to demonstrate hypermethylation of the TIMP2 gene in neoplastic tissue compared to normal tissue. Primers for detection of **CpG** islands in a number of genes are reported.

REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L1        25263 S TTAGTT/SQSN AND SQL=<100

     FILE 'CAPLUS, USPATFULL' ENTERED AT 12:53:34 ON 30 JUN 2005
L2         3653 FILE CAPLUS
L3         1383 FILE USPATFULL
     TOTAL FOR ALL FILES
L4         5036 S L1
L5          559 FILE CAPLUS
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     TOTAL FOR ALL FILES
L7          667 S L4 AND PY=<1998
L8            5 FILE CAPLUS
L9           13 FILE USPATFULL
     TOTAL FOR ALL FILES
L10          18 S L7 AND CPG
L11          18 DUP REM L10 (0 DUPLICATES REMOVED)

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L11  ANSWER 2 OF 18  USPATFULL on STN
IT  186618-22-4P
        (nucleic acid ligands that bind to and inhibit Taq and Tth DNA
        polymerases and their use in an improved PCR process)
RN   186618-22-4  USPATFULL
CN   DNA (synthetic clone 23 deoxyribonucleate nucleotidyltransferase-
       inhibiting 71-nucleotide fragment) (9CI)  (CA INDEX NAME)

        STRUCTURE DIAGRAM IS NOT AVAILABLE
ACCESSION NUMBER:        2000:12593  USPATFULL
TITLE:                   Nucleic acid ligands that bind to and inhibit DNA
                         polymerases
INVENTOR(S):             Gold, Larry, Boulder, CO, United States
                         Javasena, Sumedha, Boulder, CO, United States
PATENT ASSIGNEE(S):      NeXstar Pharmaceuticals, Inc., Boulder, CO, United
                         States (U.S. corporation)

                              NUMBER        KIND    DATE
                         ---------------- ------ --------
PATENT INFORMATION:      US 6020130               20000201
                         WO 9641010               19961219            <--
APPLICATION INFO.:       US 1997-945734           19971028  (8)
                         WO 1996-US9451           19960605
                                                  19971028  PCT 371 date
                                                  19971028  PCT 102(e) date
RELATED APPLN. INFO.:    Continuation-in-part of Ser. No. US 1995-487426, filed
                         on 7 Jun 1995, now patented, Pat. No. US 5763173 Ser.
                         No. Ser. No. US 1995-487720, filed on 7 Jun 1995, now
                         patented, Pat. No. US 5874557 And Ser. No. US
                         1995-484557, filed on 7 Jun 1995, now patented, Pat.
                         No. US 5693502
DOCUMENT TYPE:           Utility
FILE SEGMENT:            Granted
PRIMARY EXAMINER:        Zitomer, Stephanie
LEGAL REPRESENTATIVE:    Swanson & Bratschun LLC
NUMBER OF CLAIMS:        17
EXEMPLARY CLAIM:         1
NUMBER OF DRAWINGS:      35 Drawing Figure(s); 17 Drawing Page(s)
LINE COUNT:              2374
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Has CG

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention discloses high-affinity oligonucleotide ligands to the thermostable Taq polymerase and Tth polymerase. Specifically, this invention discloses DNA ligands having the ability to bind to the Taq and Tth polymerases and the methods for obtaining such ligands. The ligands are capable of inhibiting polymerases at ambient temperatures.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 3 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN

IT **218438-73-4**

RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(p16 promoter primer; cancer diagnostic method based upon DNA methylation differences)

RN 218438-73-4 CAPLUS

CN DNA, d(G-T-A-G-G-T-G-G-G-G-A-G-G-A-G-T-T-T-A-G-T-T) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

ACCESSION NUMBER: 1999:8153 CAPLUS

DOCUMENT NUMBER: 130:77056

TITLE: A cancer diagnostic method based upon DNA methylation differences at **CpG** sites

INVENTOR(S): Gonzalgo, Mark L.; Jones, Peter A.; Liang, Ganging

PATENT ASSIGNEE(S): University of Southern California, USA

SOURCE: PCT Int. Appl., 31 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9856952	A1	19981217	WO 1998-US11896	19980609 <--
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KR, KZ, LT, LU, LV, MD, MK, MN, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9878293	A1	19981230	AU 1998-78293	19980609 <--
US 6251594	B1	20010626	US 1998-94207	19980609
US 2003211473	A1	20031113	US 2001-887941	20010622
US 2002177154	A1	20021128	US 2002-109725	20020328
US 6811982	B2	20041102		

PRIORITY APPLN. INFO.:		
US 1997-49231P	P	19970609
US 1998-94207	A1	19980609
WO 1998-US11896	W	19980609
US 2001-887941	A1	20010622

AB There is disclosed a cancer diagnostic method based upon DNA methylation differences at specific **CpG** sites. The method comprises bisulfite treatment of DNA, followed by methylation-sensitive single nucleotide primer extension (Ms-SNuPE) for determination of strand-specific methylation status at cytosine residues.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 4 OF 18 USPATFULL on STN

IT **201060-07-3**

(determination of methylation status in BRCA2 gene of; PCR method specific for

primer SEQ ID No: 13

detection of CpG island methylation)
RN 201060-07-3 USPATFULL
CN DNA, d(C-G-G-T-T-T-T-T-G-T-T-A-G-T-T-T-A-T-T-T-C-G) (9CI) (CA INDEX NAME)

STRUCTURE DIAGRAM IS NOT AVAILABLE

ACCESSION NUMBER: 1998:88640 USPATFULL
TITLE: Method of detection of methylated nucleic acid using agents which modify unmethylated cytosine and distinguishing modified methylated and non-methylated nucleic acids
INVENTOR(S): Herman, James G., Timonium, MD, United States
Baylin, Stephen B., Baltimore, MD, United States
PATENT ASSIGNEE(S): The Johns Hopkins University School of Medicine, Baltimore, MD, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5786146		19980728	<--
APPLICATION INFO.:	US 1996-656716		19960603	(8)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Horlick, Kenneth R.
LEGAL REPRESENTATIVE: Fish & Richardson, P.C.
NUMBER OF CLAIMS: 27
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 11 Drawing Figure(s); 3 Drawing Page(s)
LINE COUNT: 1324
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides a method of PCR, methylation specific PCR (MSP), for rapid identification of DNA methylation patterns in a **CpG**-containing nucleic acid. MSP uses agents to modify unmethylated cytosine in a nucleic acid of interest, and then uses the PCR reaction to amplify the **CpG**-containing nucleic acid in the specimen by means of **CpG**-specific oligonucleotide primers. The oligonecleotide primers distinguish between modified methylated and nonmethylated nucleic acid. Kits utilizing MSP for the detection of methylated **CpG**-containing nucleic acids are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 5 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN
IT **211175-16-5**
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(DNA binding discrimination of murine DNA cytosine-C5 methyltransferase)
RN 211175-16-5 CAPLUS
CN DNA, d(G-G-G-A-A-T-T-C-A-C-A-A-G-C-T-T-G-A-A-A-C-T-A-A-A-T-C-T-A-T-T-A-C-G-A-C-T-T-C-T-A-C-A-C-T-C-T-T-T-A-G-G-A-T-C-C-A-T-G-A-A-T-T-C-C-C), double-stranded complementary (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

ACCESSION NUMBER: 1998:387706 CAPLUS
DOCUMENT NUMBER: 129:158334
TITLE: DNA binding discrimination of the murine DNA cytosine-C5 methyltransferase
AUTHOR(S): Flynn, James; Azzam, Ramzi; Reich, Norbert
CORPORATE SOURCE: Department of Chemistry and Program in Biochemistry and Molecular Biology, University of California, Santa Barbara, CA, 93106, USA
SOURCE: Journal of Molecular Biology (**1998**), 279(1), 101-116
CODEN: JMOBAK; ISSN: 0022-2836

PUBLISHER: Academic Press Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Mammalian DNA cytosine-C5 methyltransferase modifies the **CpG** dinucleotide in the context of many different genomic sequences. A rigorous DNA binding assay was developed for the murine enzyme and used to define how sequences flanking the **CpG** dinucleotide affect the stability of the enzyme:DNA complex. Oligonucleotides containing a single **CpG** site form reversible 1:1 complexes with the enzyme that are sequence-specific. A guanine/cytosine-rich 30 base-pair sequence, a mimic of the GC-box cis-element, bound threefold more tightly than an adenine/thymine-rich sequence, a mimic of the cAMP responsive element. However, the binding discrimination between hemi- and unmethylated forms of these DNA substrates was small, as we previously observed at the KmDNA level (Biochem., 35, 7308-7315 (1996)). Single-stranded substrates are bound much more weakly than double-stranded DNA forms. An in vitro screening method was used to select for **CpG** flanking sequence preferences of the DNA methyltransferase from a large, divergent population of DNA substrates. After five iterative rounds of increasing selective pressure, guanosine/cytosine-rich sequences were abundant and contributed to binding stabilization for at least 12 base-pairs on either side of a central **CpG**. Our results suggest a read-out of sequence-dependent conformational features, such as helical flexibility, minor groove dimensions and critical phosphate orientation and mobility, rather than interactions with specific bases over the course of two complete helical turns. Thus, both studies reveal a preference for guanosine/cytosine deoxynucleotides flanking the cognate **CpG**. The enzyme specificity for similar sequences in the genome may contribute to the in vivo functions of this vital enzyme.
REFERENCE COUNT: 78 THERE ARE 78 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 6 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN
IT **201060-07-3**
RL: ANT (Analyte); PRP (Properties); ANST (Analytical study)
(determination of methylation status in BRCA2 gene of; PCR method specific for
detection of **CpG** island methylation)
RN 201060-07-3 CAPLUS
CN DNA, d(C-G-G-T-T-T-T-T-G-T-T-A-G-T-T-T-A-T-T-T-C-G) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
ACCESSION NUMBER: 1998:1598 CAPLUS
DOCUMENT NUMBER: 128:85152
TITLE: A PCR method specific for the detection of **CpG** island methylation
INVENTOR(S): Herman, James G.; Baylin, Stephen B.
PATENT ASSIGNEE(S): Johns Hopkins University School of Medicine, USA
SOURCE: PCT Int. Appl., 71 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9746705	A1	19971211	WO 1997-US9533	19970603 <--
W: CA, IL, JP, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5786146	A	19980728	US 1996-656716	19960603 <--
US 6017704	A	20000125	US 1997-835728	19970411
CA 2257104	AA	19971211	CA 1997-2257104	19970603 <--

EP 954608	A1	19991110	EP 1997-927933		19970603
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI					
JP 2000511776	T2	20000912	JP 1998-500779		19970603
JP 3612080	B2	20050119			
IL 127342	A1	20020725	IL 1997-127342		19970603
PRIORITY APPLN. INFO.:			US 1996-656716	A	19960603
			US 1997-835728	A	19970411
			WO 1997-US9533	W	19970603

AB The present invention provides a method of PCR, methylation specific PCR (MSP), for rapid identification of DNA methylation patterns in a **CpG**-containing nucleic acid. MSP uses the PCR reaction itself to distinguish between methylated and unmethylated DNA, which adds an improved sensitivity of methylation detection. The method involves converting the 5-Me cytosine of **CpG** islands to uracil and then performing PCR with probes that will hybridize to the uracil-containing DNA, but not to the 5-Me cytosine-containing sequences. The method is sensitive to 0.1% of methylated alleles of a given **CpG** island and can be performed on DNA extracted from paraffin-embedded samples. The method can be used to assay DNA methylation in tumors and tumorigenesis and its effects upon gene expression. The method is used to demonstrate hypomethylation of the TIMP2 gene in neoplastic tissue compared to normal tissue. Primers for detection of **CpG** islands in a number of genes are reported.

L11 ANSWER 7 OF 18 USPATFULL on STN
IT **125912-91-6**
(in Chlamydia trachomatis detection by amplified sandwich nucleic acid hybridization assay)
RN 125912-91-6 USPATFULL
CN DNA, d(T-T-T-T-C-T-G-C-T-C-G-T-T-G-C-A-A-G-A-G-A-C-T-C-T-T-A-G-T-T) (9CI) (CA INDEX NAME)

STRUCTURE DIAGRAM IS NOT AVAILABLE

ACCESSION NUMBER:	97:36063 USPATFULL
TITLE:	Nucleic acid multimers and amplified nucleic acid hybridization assays using same
INVENTOR(S):	Urdea, Michael S., Alamo, CA, United States Warner, Brian, Martinez, CA, United States Horn, Thomas, Berkeley, CA, United States
PATENT ASSIGNEE(S):	Chiron Corporation, Emeryville, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5624802		19970429	<--
APPLICATION INFO.:	US 1995-479493		19950607 (8)	

RELATED APPLN. INFO.: Continuation of Ser. No. US 1993-163916, filed on 8 Dec 1993, now abandoned which is a continuation of Ser. No. US 1992-823890, filed on 22 Jan 1992, now abandoned which is a division of Ser. No. US 1989-340031, filed on 18 Apr 1989, now patented, Pat. No. US 5124246, issued on 23 Jun 1992 which is a continuation-in-part of Ser. No. US 1988-252638, filed on 30 Sep 1988, now abandoned which is a continuation-in-part of Ser. No. US 1988-185201, filed on 22 Apr 1988, now abandoned which is a continuation-in-part of Ser. No. US 1987-109282, filed on 15 Oct 1987, now abandoned

DOCUMENT TYPE:	Utility
FILE SEGMENT:	Granted
PRIMARY EXAMINER:	Marschel, Ardin H.
LEGAL REPRESENTATIVE:	Dylan, Tyler, Goldman, Kenneth M., Blackburn, Robert P.
NUMBER OF CLAIMS:	39
EXEMPLARY CLAIM:	1

NUMBER OF DRAWINGS: 24 Drawing Figure(s); 22 Drawing Page(s)
LINE COUNT: 2226
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Linear or branched oligonucleotide multimers useful as amplifiers in biochemical assays which comprise (1) at least one first single-stranded oligonucleotide unit that is complementary to a single-stranded oligonucleotide sequence of interest, and (2) a multiplicity of second single-stranded oligonucleotide units that are complementary to a single-stranded labeled oligonucleotide. Amplified sandwich nucleic acid hybridizations and immunoassays using the multimers are exemplified.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 8 OF 18 USPATFULL on STN
IT **150141-28-9**
(hybridization probe, for solution phase sandwich hybridization assay of Chlamydiae)
RN 150141-28-9 USPATFULL
CN DNA, d(T-T-C-T-T-T-A-G-A-T-T-T-C-T-T-A-G-T-T-A-T-T-T-C-T-T-C-A-A-A) (9CI) (CA INDEX NAME)

STRUCTURE DIAGRAM IS NOT AVAILABLE
ACCESSION NUMBER: 97:29334 USPATFULL
TITLE: Chlamydiae probes for use in solution phase sandwich hybridization assays
INVENTOR(S): Sanchez-Pescador, Ray, San Leandro, CA, United States
Besemer, Diana J., Albany, CA, United States
Urdea, Michael S., Alamo, CA, United States
PATENT ASSIGNEE(S): Chiron Corporation, Emeryville, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5618674		19970408	<--
APPLICATION INFO.:	US 1995-479487		19950607 (8)	

RELATED APPLN. INFO.: Continuation of Ser. No. US 1991-813587, filed on 23 Dec 1991, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Sisson, Bradley L.
LEGAL REPRESENTATIVE: Dylan, Tyler, Goldman, Kenneth M., Blackburn, Robert P.
NUMBER OF CLAIMS: 20
EXEMPLARY CLAIM: 1
LINE COUNT: 1149
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Novel DNA probe sequences for detection of Chlamydiae in a sample in a solution phase sandwich hybridization assay are described. Amplified nucleic acid hybridization assays using the probes are exemplified.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 9 OF 18 USPATFULL on STN
IT **125912-91-6**
(in Chlamydia trachomatis detection by amplified sandwich nucleic acid hybridization assay)
RN 125912-91-6 USPATFULL
CN DNA, d(T-T-T-T-C-T-G-C-T-C-G-T-T-G-C-A-A-G-A-G-A-C-T-C-T-T-A-G-T-T) (9CI) (CA INDEX NAME)

STRUCTURE DIAGRAM IS NOT AVAILABLE
ACCESSION NUMBER: 97:24881 USPATFULL
TITLE: Nucleic acid hybridization assay for hepatitis B virus DNA

INVENTOR(S): Urdea, Michael S., Alamo, CA, United States
Warner, Brian, Martinez, CA, United States
Running, Joyce A., Concord, CA, United States
Kolberg, Janice A., Richmond, CA, United States
Clyne, Jennifer M., Martinez, CA, United States
Sanchez-Pescador, Ray, San Leandro, CA, United States
Horn, Thomas, Berkeley, CA, United States
PATENT ASSIGNEE(S): Chiron Corporation, Emeryville, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5614362		19970325	<--
APPLICATION INFO.:	US 1994-315685		19940930	(8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1992-823890, filed on 22 Jan 1992, now abandoned which is a division of Ser. No. US 1989-340031, filed on 18 Apr 1989, now patented, Pat. No. US 5124246 which is a continuation-in-part of Ser. No. US 1988-252638, filed on 30 Sep 1988, now abandoned which is a continuation-in-part of Ser. No. US 1988-185201, filed on 22 Apr 1988, now abandoned which is a continuation-in-part of Ser. No. US 1987-109282, filed on 15 Oct 1987, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Marschel, Ardin H.
LEGAL REPRESENTATIVE: Goldman, Kenneth M., Blackburn, Robert P.
NUMBER OF CLAIMS: 2
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 24 Drawing Figure(s); 22 Drawing Page(s)
LINE COUNT: 2067
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Linear or branched oligonucleotide multimers useful as amplifiers in biochemical assays which comprise (1) at least one first single-stranded oligonucleotide unit that is complementary to a single-stranded oligonucleotide sequence of interest, and (2) a multiplicity of second single-stranded oligonucleotide units that are complementary to a single-stranded labeled oligonucleotide. Amplified sandwich nucleic acid hybridizations and immunoassays using the multimers are exemplified.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 10 OF 18 USPATFULL on STN
IT **125912-91-6**
(in Chlamydia trachomatis detection by amplified sandwich nucleic acid hybridization assay)
RN 125912-91-6 USPATFULL
CN DNA, d(T-T-T-T-C-T-G-C-T-C-G-T-T-G-C-A-A-G-A-G-A-C-T-C-T-T-A-G-T-T) (9CI) (CA INDEX NAME)

STRUCTURE DIAGRAM IS NOT AVAILABLE

ACCESSION NUMBER: 97:3960 USPATFULL
TITLE: Modified N-4 nucleotides for use in amplified nucleic acid hybridization assays
INVENTOR(S): Urdea, Michael S., Alamo, CA, United States
Horn, Thomas, Berkeley, CA, United States
PATENT ASSIGNEE(S): Chiron Corporation, Emeryville, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5594118		19970114	<--
APPLICATION INFO.:	US 1995-438413		19950510	(8)

RELATED APPLN. INFO.: Division of Ser. No. US 1993-163916, filed on 8 Dec 1993 which is a continuation of Ser. No. US 1992-823890, filed on 22 Jan 1992, now abandoned which is a division of Ser. No. US 1989-340031, filed on 18 Apr 1989, now patented, Pat. No. US 5124246 which is a continuation-in-part of Ser. No. US 1988-252638, filed on 30 Sep 1988, now abandoned which is a continuation-in-part of Ser. No. US 1988-185201, filed on 22 Apr 1988, now abandoned which is a continuation-in-part of Ser. No. US 1987-109282, filed on 15 Oct 1987, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Jones, W. Gary
ASSISTANT EXAMINER: Rees, Dianne
LEGAL REPRESENTATIVE: Dylan, Tyler M., Goldman, Kenneth M., Blackburn, Robert P.
NUMBER OF CLAIMS: 5
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 24 Drawing Figure(s); 22 Drawing Page(s)
LINE COUNT: 2123
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Linear or branched oligonucleotide multimers useful as amplifiers in biochemical assays which comprise (1) at least one first single-stranded oligonucleotide unit that is complementary to a single-stranded oligonucleotide sequence of interest, and (2) a multiplicity of second single-stranded oligonucleotide units that are complementary to a single-stranded labeled oligonucleotide. Amplified sandwich nucleic acid hybridizations and immunoassays using the multimers are exemplified.

CAS INDEXING IS AVAILABLE FOR THIS PATENT..

L11 ANSWER 11 OF 18 USPATFULL on STN
IT **158485-64-4P**
(preparation and reactions of, in preparation conjugates with peptides, targetting of oligonucleotides in relation to)
RN 158485-64-4 USPATFULL
CN DNA, d(T-A-A-T-T-A-T-T-C-A-G-C-C-A-T-T-T-A-T-T-A-T-T-A-G-T-T), 5'-[6-[(iodoacetyl)amino]hexyl hydrogen phosphate] (9CI) (CA INDEX NAME)

STRUCTURE DIAGRAM IS NOT AVAILABLE
ACCESSION NUMBER: 96:104105 USPATFULL
TITLE: Peptide linkers for improved oligonucleotide delivery
INVENTOR(S): Meyer, Jr., Rich B., Woodinville, WA, United States
Gall, Alexander A., Bothell, WA, United States
Reed, Michael W., Seattle, WA, United States
PATENT ASSIGNEE(S): MicroProbe Corporation, Bothell, WA, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5574142		19961112	<--
APPLICATION INFO.:	US 1992-991199		19921215	(7)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Fleisher, Mindy
ASSISTANT EXAMINER: Carter, Philip W.
LEGAL REPRESENTATIVE: Klein & Szekeres
NUMBER OF CLAIMS: 12
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 10 Drawing Figure(s); 10 Drawing Page(s)
LINE COUNT: 1837

ok
ODN2
SEQ ID NO: #9
#2

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A covalently linked conjugate of an oligonucleotide (ODN) with a peptide and a carrier or targeting ligand (ODN-peptide-carrier) includes a therapeutic oligonucleotide which is capable of selectively binding to a target sequence of DNA, RNA or protein inside a target cell. The ODN is covalently linked to a peptide which is capable of being cleaved by proteolytic enzymes inside the target cell. The peptide, in turn is covalently linked to a carrier or targeting ligand moiety which facilitates delivery of the entire ODN-peptide-carrier conjugate into the cell, and preferably into a specific target tissue type. Inside the cell, the peptide is cleaved, releasing the ODN which, by binding to the target DNA, RNA or protein sequence, brings about a beneficial result.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 12 OF 18 USPATFULL on STN

IT **125912-91-6**
(in Chlamydia trachomatis detection by amplified sandwich nucleic acid hybridization assay)

RN 125912-91-6 USPATFULL

CN DNA, d(T-T-T-T-C-T-G-C-T-C-G-T-T-G-C-A-A-G-A-G-A-C-T-C-T-T-A-G-T-T) (9CI) (CA INDEX NAME)

STRUCTURE DIAGRAM IS NOT AVAILABLE

ACCESSION NUMBER:	96:101438 USPATFULL
TITLE:	Nucleic acid probes useful in detecting Chlamydia trachomatis and amplified nucleic acid hybridization assays using same
INVENTOR(S):	Urdea, Michael S., Alamo, CA, United States Clyne, Jennifer M., Martinez, CA, United States
PATENT ASSIGNEE(S):	Chiron Corporation, Emeryville, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5571670		19961105	<--
APPLICATION INFO.:	US 1993-167435		19931214 (8)	

RELATED APPLN. INFO.: Continuation of Ser. No. US 1992-824795, filed on 22 Jan 1992, now abandoned which is a division of Ser. No. US 1989-340031, filed on 18 Apr 1989, now patented, Pat. No. US 5124246 which is a continuation-in-part of Ser. No. US 1988-252638, filed on 30 Sep 1988, now abandoned which is a continuation-in-part of Ser. No. US 1988-185201, filed on 22 Apr 1988, now abandoned which is a continuation-in-part of Ser. No. US 1987-109282, filed on 15 Oct 1987, now abandoned

DOCUMENT TYPE:	Utility
FILE SEGMENT:	Granted
PRIMARY EXAMINER:	Jones, W. Gary
ASSISTANT EXAMINER:	Marschel, Ardin H.
LEGAL REPRESENTATIVE:	Goldman, Kenneth M., Blackburn, Robert P.
NUMBER OF CLAIMS:	3
EXEMPLARY CLAIM:	3
NUMBER OF DRAWINGS:	24 Drawing Figure(s); 22 Drawing Page(s)
LINE COUNT:	2093

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Linear or branched oligonucleotide multimers useful as amplifiers in biochemical assays which comprise (1) at least one first single-stranded oligonucleotide unit that is complementary to a single-stranded oligonucleotide sequence of interest, and (2) a multiplicity of second single-stranded oligonucleotide units that are complementary to a single-stranded labeled oligonucleotide. Amplified sandwich nucleic acid hybridizations and immunoassays using the multimers are exemplified.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 13 OF 18 USPATFULL on STN
IT **182327-86-2**
(PCR primer for EDA gene; anhidrotic ectodermal dysplasia gene and method of detecting same)
RN 182327-86-2 USPATFULL
CN DNA, d(A-C-C-T-T-T-A-G-T-T-A-G-A-T-T-G-A-T-G-A-A-G-C-C) (9CI) (CA INDEX NAME)

STRUCTURE DIAGRAM IS NOT AVAILABLE

ACCESSION NUMBER: 96:85067 USPATFULL
TITLE: Anhidrotic ectodermal dysplasia gene and method of detecting same
INVENTOR(S): Kere, Juha, Helsinki, Finland
Schlessinger, David, University City, MO, United States
de la Chapelle, Albert, Helsingfors, Finland
PATENT ASSIGNEE(S): Washington University, St. Louis, MO, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5556786		19960917	<--
APPLICATION INFO.:	US 1993-52997		19930427	(8)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Patterson, Jr., Charles L.
ASSISTANT EXAMINER: Hobbs, Lisa J.
LEGAL REPRESENTATIVE: Popham, Haik, Schnobrich & Kaufman, Ltd.
NUMBER OF CLAIMS: 5
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 4 Drawing Figure(s); 4 Drawing Page(s)
LINE COUNT: 998
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to various yeast artificial chromosomes (YACs) which contain all or a portion of the human EDA gene for anhidrotic ectodermal dysplasia, probes specific for human EDA gene and methods of diagnosis of EDA gene-related disorders.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 14 OF 18 USPATFULL on STN
IT **162493-96-1P**
(automated parallel synthesis of large nos. of different oligonucleotide sequences of different lengths and apparatus)
RN 162493-96-1 USPATFULL
CN DNA, d(A-T-C-T-T-A-G-T-T-C-A-T-G-A-C-A-G-A-A-T-T-G-A-A) (9CI) (CA INDEX NAME)

STRUCTURE DIAGRAM IS NOT AVAILABLE

ACCESSION NUMBER: 96:68132 USPATFULL
TITLE: Method for automated synthesis of oligonucleotides
INVENTOR(S): McGraw, Royal A., Athens, GA, United States
Grosse, William M., Athens, GA, United States
PATENT ASSIGNEE(S): University of Georgia Research Foundation, Inc., Athens, GA, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5541314		19960730	<--
APPLICATION INFO.:	US 1994-291109		19940802	(8)
RELATED APPLN. INFO.:	Division of Ser. No. US 1993-16739, filed on 11 Feb			

1993, now patented, Pat. No. US 5368823
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Warden, Robert J.
ASSISTANT EXAMINER: Snider, Theresa T.
LEGAL REPRESENTATIVE: Greenlee, Winner and Sullivan, P.C.
NUMBER OF CLAIMS: 5
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 15 Drawing Figure(s); 9 Drawing Page(s)
LINE COUNT: 1276
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Apparatus and method for the automated synthesis of DNA segments utilizing multiple reaction columns, all of which are open at the inlet end to the atmosphere of a reaction chamber. A movable reagent supply line outlet is positioned adjacent to the column inlet end to apply reagent to each of the columns according to an input sequence of delivery. The delivery sequence is under processor control. Reagents are removed from all columns simultaneously through the application of vacuum at the outlet end of each column. The device enables the parallel synthesis of large numbers of different oligonucleotide sequences of different lengths.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 15 OF 18 USPATFULL on STN
IT **162493-96-1P**
(automated parallel synthesis of large nos. of different oligonucleotide sequences of different lengths and apparatus)
RN 162493-96-1 USPATFULL
CN DNA, d(A-T-C-T-T-A-G-T-T-C-A-T-G-A-C-A-G-A-A-T-T-G-A-A) (9CI) (CA INDEX NAME)

STRUCTURE DIAGRAM IS NOT AVAILABLE
ACCESSION NUMBER: 94:104297 USPATFULL
TITLE: Automated synthesis of oligonucleotides
INVENTOR(S): McGraw, Royal A., Athens, GA, United States
Grosse, William M., Athens, GA, United States
PATENT ASSIGNEE(S): University of Georgia Research Foundation, Inc., Athens, GA, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5368823		19941129	<--
APPLICATION INFO.:	US 1993-16739		19930211	(8)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Warden, Robert J.
ASSISTANT EXAMINER: Trembley, T. A.
LEGAL REPRESENTATIVE: Greenlee and Winner
NUMBER OF CLAIMS: 26
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 15 Drawing Figure(s); 9 Drawing Page(s)
LINE COUNT: 1432
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Apparatus and method for the automated synthesis of DNA segments utilizing multiple reaction columns, all of which are open at the inlet end to the atmosphere of a reaction chamber. A movable reagent supply line outlet is positioned adjacent to the column inlet end to apply reagent to each of the columns according to an input sequence of delivery. The delivery sequence is under processor control. Reagents are removed from all columns simultaneously through the application of vacuum at the outlet end of each column. The device enables the parallel synthesis of large numbers of different oligonucleotide sequences of

different lengths.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 16 OF 18 USPATFULL on STN
IT **125912-91-6**
(in Chlamydia trachomatis detection by amplified sandwich nucleic acid hybridization assay)
RN 125912-91-6 USPATFULL
CN DNA, d(T-T-T-T-C-T-G-C-T-C-G-T-T-G-C-A-A-G-A-G-A-C-T-C-T-T-A-G-T-T) (9CI) (CA INDEX NAME)

STRUCTURE DIAGRAM IS NOT AVAILABLE

ACCESSION NUMBER:	94:93479 USPATFULL
TITLE:	Bifunctional blocked phosphoramidites useful in making nucleic acid mutimers
INVENTOR(S):	Urdea, Michael S., Alamo, CA, United States Warner, Brian, Martinez, CA, United States Running, Joyce A., Concord, CA, United States Kolberg, Janice A., Richmond, CA, United States Clyne, Jennifer M., Martinez, CA, United States Sanchez-Pescador, Ray, San Leandro, CA, United States Horn, Thomas, Berkeley, CA, United States
PATENT ASSIGNEE(S):	Chiron Corporation, Emeryville, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5359100		19941025	<--
APPLICATION INFO.:	US 1993-107358		19930813 (8)	

RELATED APPLN. INFO.: Continuation of Ser. No. US 1992-823890, filed on 22 Jan 1992 which is a division of Ser. No. US 1989-340031, filed on 18 Apr 1989, now patented, Pat. No. US 5124246 which is a continuation-in-part of Ser. No. US 1988-252638, filed on 30 Sep 1988, now abandoned which is a continuation-in-part of Ser. No. US 1988-185201, filed on 22 Apr 1988, now abandoned which is a continuation-in-part of Ser. No. US 1987-109282, filed on 15 Oct 1987, now abandoned

DOCUMENT TYPE:	Utility
FILE SEGMENT:	Granted
PRIMARY EXAMINER:	Lee, Mary C.
ASSISTANT EXAMINER:	Ambrose, Michael G.
LEGAL REPRESENTATIVE:	Goldman, Kenneth M., Blackburn, Robert P.
NUMBER OF CLAIMS:	13
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	24 Drawing Figure(s); 22 Drawing Page(s)
LINE COUNT:	1984

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Linear or branched oligonucleotide multimers useful as amplifiers in biochemical assays which comprise (1) at least one first single-stranded oligonucleotide unit that is complementary to a single-stranded oligonucleotide sequence of interest, and (2) a multiplicity of second single-stranded oligonucleotide units that are complementary to a single-stranded labeled oligonucleotide. Amplified sandwich nucleic acid hybridizations and immunoassays using the multimers are exemplified.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 17 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN
IT **153892-34-3**
RL: USES (Uses)
(PCR primer, blood-coagulation factor IX gene mutation detection in

humans with hemophilia B by)
RN 153892-34-3 CAPLUS
CN DNA, d(G-T-G-A-T-T-A-G-T-T-A-G-T-G-A-G-A-G-G-C-C-C-T-G-T) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
ACCESSION NUMBER: 1994:209593 CAPLUS
DOCUMENT NUMBER: 120:209593
TITLE: Detection of a molecular defect in 40 of 44 patients with hemophilia B by PCR and denaturing gradient gel electrophoresis
AUTHOR(S): Tartary, Michel; Vidaud, Dominique; Piao, Yingchao; Costa, Jean Marc; Bahnak, Bruce R.; Fressinaud, Edith; Congard, Brigitte; Laurian, Yves; Meyer, Dominique; et al.
CORPORATE SOURCE: Hopi. Bicetre, Le Kremlin-Bicetre, 9127S, Fr.
SOURCE: British Journal of Haematology (**1993**), 84(4), 662-9
CODEN: BJHEAL; ISSN: 0007-1048
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Oligonucleotides were computer designed to amplify by the polymerase chain reaction (PCR) the coding region, splice junctions, 112 bp of the 5' flanking region and 279 bp surrounding the polyadenylation site of the factor IX gene for anal. by denaturing gradient gel electrophoresis (DGGE). Forty-four unselected hemophilia B patients were studied of whom 24 had severe hemophilia and 20 had a mild to moderate form of the disease. Potential mutations were identified in 40 (91%) of the 44 cases. A defect could not be detected in three severe and one mild hemophiliac by DGGE anal. and direct sequencing of all the PCR fragments from these patients revealed no nucleotide alteration supporting the DGGE results. A total of 37 point mutations, two complete gene deletions and a duplication of 26 bp were found. The 37 point mutations included 35 single nucleotide substitutions, a deletion and an insertion of one nucleotide. The 35 single nucleotide substitutions included 26 missense mutations, seven nonsense mutations, a G (-6) to A transition in the promoter region and a G (30154) to A transition within the donor splice site of the last intron. Fifteen of these nucleotide substitutions involved **CpG** dinucleotides. Fifteen point mutations were found at codons where nucleotide substitutions had not been detected before. An insertion of a single nucleotide T at position 6370 and deletion of a G at nucleotide 30845 resulted in frameshift mutations creating stop codons at amino acid positions -2 and 250, resp. A duplication of 26 bp (17747-17772) in exon V was found in a severe hemophilia patient resulting in a termination codon in exon VI. The detection of the mutation by the combined use of PCR, DGGE and direct sequencing was important for carrier diagnosis of 20 families with no prior history of hemophilia B.

L11 ANSWER 18 OF 18 USPATFULL on STN
IT **125912-91-6**
(in Chlamydia trachomatis detection by amplified sandwich nucleic acid hybridization assay)
RN 125912-91-6 USPATFULL
CN DNA, d(T-T-T-T-C-T-G-C-T-C-G-T-T-G-C-A-A-G-A-G-A-C-T-C-T-T-A-G-T-T) (9CI) (CA INDEX NAME)

STRUCTURE DIAGRAM IS NOT AVAILABLE
ACCESSION NUMBER: 92:50988 USPATFULL
TITLE: Nucleic acid multimers and amplified nucleic acid hybridization assays using same
INVENTOR(S): Urdea, Michael S., Alamo, CA, United States
Warner, Brian, Martinez, CA, United States
Horn, Thomas, Berkeley, CA, United States

PATENT ASSIGNEE(S): Chiron Corporation, Emeryville, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5124246		19920623	<--
APPLICATION INFO.:	US 1989-340031		19890418 (7)	

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1988-252638, filed on 30 Sep 1988, now abandoned which is a continuation-in-part of Ser. No. US 1988-185201, filed on 22 Apr 1988, now abandoned which is a continuation-in-part of Ser. No. US 1987-109282, filed on 15 Oct 1987, now abandoned

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Wax, Robert A.
ASSISTANT EXAMINER: Marschel, Ardin H.
LEGAL REPRESENTATIVE: Morrison & Foerster
NUMBER OF CLAIMS: 59
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 24 Drawing Figure(s); 22 Drawing Page(s)
LINE COUNT: 2255
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Linear or branched oligonucleotide multimers useful as amplifiers in biochemical assays which comprise (1) at least one first single-stranded oligonucleotide unit that is complementary to a single-stranded oligonucleotide sequence of interest, and (2) a multiplicity of second single-stranded oligonucleotide units that are complementary to a single-stranded labeled oligonucleotide. Amplified sandwich nucleic acid hybridizations and immunoassays using the multimers are exemplified.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.